

Appl. No. : 10/009,792  
Filed : December 13, 2001

### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. **(Currently amended)** A recombinant plasmid vector which comprises:  
a kanamycin resistance gene;  
a promoter;  
a nucleotide sequence coding for an endoxylanase signal sequence;  
a nucleotide sequence coding for an oligopeptide consisting of 13 amino acids,  
wherein-including 6 of the 13 amino acids are consecutive histidine residues; and,  
a human granulocyte colony stimulating factor (hG-CSF) gene.
2. **(Currently amended)** The recombinant plasmid vector of claim 1, wherein  
the nucleotide sequence ~~codes~~ coding for ~~an the~~ oligopeptide ~~which comprises an amino acid~~  
~~sequence of isoleucine-glutamic acid-glycine-arginine (Ile-Glu-Gly-Arg; comprises a nucleic acid~~  
encoding SEQ ID NO: 28) ~~within the oligopeptide.~~
3. **(Currently amended)** A recombinant plasmid vector, pTHKCSFmII  
~~represented in Figure 13~~ which comprises:  
a kanamycin resistance gene;  
a Trc promoter;  
a nucleotide sequence coding for ~~an~~ a *Bacillus sp.* endoxylanase signal sequence  
~~derived from *Bacillus sp.*;~~  
a nucleotide sequence coding for the oligopeptide of SEQ ID NO: 1; and  
a ~~modified~~ gene coding for a human granulocyte colony stimulating factor (hG-CSF) lacking its native signal sequence.
4. **(Currently amended)** ~~A microorganism, *E. coli*~~ transformed with the  
plasmid vector, pTHKCSFmII of claim 3.
5. **(Currently amended)** The *E. coli* microorganism of claim 4, wherein the  
*E. coli* is selected from the group consisting of *E. coli* XL1-Blue, *E. coli* MC4100, *E. coli* BL21  
(DE3), *E. coli* HB101 and *E. coli* W3110.

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6. **(Currently amended)** *E. coli* MC4100/pTHKCSFmII, deposited as (KCTC 0754BP), wherein said *E. coli* is transformed with the plasmid vector, pTHKCSFmII of claim 3.

7. **(Original)** A process for preparing a human granulocyte colony stimulating factor, which comprises the steps of:

culturing *E. coli* transformed with the plasmid vector of claim 1 to obtain a human granulocyte colony stimulating factor fusion protein; and,

treating the human granulocyte colony stimulating factor fusion protein with a protease to obtain a human granulocyte colony stimulating factor.

8. **(Currently amended)** The process for preparing a human granulocyte colony stimulating factor of claim 7, wherein the plasmid vector ~~of claim 1~~ is pTHKCSFmII.

9. **(Currently amended)** The process for preparing a human granulocyte colony stimulating factor of claim 7, wherein the human granulocyte colony stimulating factor fusion protein is isolated from the protein pool obtained from the culture using a Ni-column.

10. **(Original)** The process for preparing a human granulocyte colony stimulating factor of claim 7, wherein the protease is Factor Xa.

11. **(Previously added)** The recombinant plasmid vector of Claim 3, wherein said vector comprises the nucleotide sequence of SEQ ID NO: 26.

12. **(Currently amended)** The recombinant plasmid vector of Claim 3, wherein said ~~modified~~ gene comprises nucleotides 88 to 610 of the nucleotide sequence of SEQ ID NO: 18 and encodes the hG-CSF amino acid sequence of SEQ ID NO: 19.

13. **(Previously added)** The recombinant plasmid vector of Claim 3, wherein said nucleotide sequence coding for said endoxylanase signal sequence comprises nucleotides 1-84 of SEQ ID NO: 26.